



# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME:</b>	Mortar Mix
<b>MSDS REVISION DATE:</b>	August, 2000
<b>CHEMICAL NAME:</b>	Amorphous silica, quartz, calcium silicates
<b>FORMULA:</b>	Mixture
<b>MANUFACTURER/SUPPLIER</b>	
Ross Island Sand & Gravel Co. 4315 SE McLoughlin Blvd. Portland, Oregon 97202	Mailing Address: PO Box 82249 Portland, Oregon 97282
<b>Emergency/Non-Emergency Number:</b>	(503) 239-5504 Monday-Friday 8-5 PST

## 2. COMPOSITION/INFORMATION INGREDIENTS

INGREDIENT NAME	CAS #	EXPOSURE LIMITS		CONC. %
		OSHA (mg/m <sup>3</sup> )	ACGIH (mg/m <sup>3</sup> )	
Silicon Dioxide, SiO <sub>2</sub> (amorphous)	68855-54-9	6.1 total dust based on maximum free silica	10 inhalable dust 3 respirable dust	0-64
Calcium Silicates	1344-95-2	15 total dust 5 respirable dust	10 total dust	6-12
Calcium Carbonate	471-34-1	15 total dust 5 respirable dust	10 total dust	6-12
Aluminum Silicates	Various	15 total dust 5 respirable dust	10 inhalable dust 3 respirable dust	0.1-10
Silicon Dioxide, SiO <sub>2</sub> (free silica)	14808-60-7	2 total dust 0.67 respirable dust based on maximum free silica	0.1 respirable dust	0-6.5
Magnesium Oxide	1309-37-1	15 total dust 5 respirable dust	10 inhalable dust 3 respirable dust	0.2-1

## 3. HAZARDS IDENTIFICATION

<b>***** EMERGENCY OVERVIEW *****</b>	
Gray powder. Free crystalline silica may cause cancer.	
<b>ROUTES OF ENTRY:</b> Inhalation, eyes, skin	
<b>HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:</b>	
<b>ACUTE INHALATION:</b>	Dust may mechanically irritate respiratory system and cause coughing.
<b>ACUTE SKIN CONTACT:</b>	Dust may cause mechanical irritation.
<b>ACUTE EYE CONTACT:</b>	Dust may cause mechanical irritation.
<b>ACUTE INGESTION:</b>	Small quantities are not known to be harmful. Ill effects are possible if larger quantities are consumed.
<b>CHRONIC EXPOSURE:</b>	Dust may cause silicosis, shortness of breath caused by lung scarring, pain in chest and coughing. Prolonged exposure to silica in the form of quartz or cristobalite is associated with increased risk of lung cancer.

**3. HAZARDS IDENTIFICATION *cont'd.*****CARCINOGENICITY:**

- ACGIH:** Free crystalline silica is listed as a suspected human carcinogen.  
**NTP:** Respirable silica may reasonably be anticipated to be carcinogenic.  
**IARC:** Crystalline silica in the form of quartz or cristobalite has been classified as carcinogenic to humans.  
**OSHA:** No

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Persons with impaired respiratory function may be more susceptible to the effects of the dust.

**4. FIRST AID MEASURES**

**INHALATION:** Remove victim to fresh air, if not breathing, give artificial respiration. If any symptoms or irritation persist, contact a physician.

**SKIN:** Wash with soap and water. If any symptoms or irritation persist, contact a physician.

**EYE:** Flush with large amounts of water for 15 minutes. If any symptoms or irritation persist, contact a physician.

**INGESTION:** Do not induce vomiting, give large quantities of water or milk. If any symptoms or irritation persist, contact a physician.

**5. FIRE FIGHTING MEASURES**

<b>FLASH POINT:</b>	Not Combustible
<b>AUTO IGNITION TEMPERATURE:</b>	Not Applicable
<b>LOWER FLAMMABLE LIMIT:</b>	Not Applicable
<b>UPPER FLAMMABLE LIMIT:</b>	Not Applicable
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	None, not combustible
<b>FIRE AND EXPLOSION HAZARD:</b>	None. Not sensitive to explosion. Will not support combustion.
<b>EXTINGUISHING MEDIA:</b>	Not combustible. Use media appropriate for surrounding fire.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	Does not burn. SCBA required for standard fire fighting.

**6. ACCIDENTAL RELEASE MEASURES:**

**SPILL OR LEAK PROCEDURES:** Stop source of spill. Wear appropriate personal protective equipment. Pick up and place in a suitable container for reclamation or disposal using a method that does not generate dust. Wet sweeping may be used to avoid dusting.

**7. HANDLING AND STORAGE:**

**HANDLING AND STORAGE PRECAUTIONS:** Protect against physical damage. Wear appropriate personal protective equipment as specified in Section 8.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION:**

**EYE PROTECTION:** Safety glasses with sideshields or mechanical goggles suitable for dust protection.

**SKIN PROTECTION:** None required other than that for personal hygiene. To reduce exposure, work clothing should be left at the workplace.

**RESPIRATORY PROTECTION:** Use NIOSH approved respirators with High Efficiency Particulate Air (HEPA) or P100 filters when exposure limits are or may be exceeded. Higher dust levels may require a powered air purifying respirator with HEPA or P100 filter, or a positive pressure supplied air respirator.

**ENGINEERING CONTROLS:** Minimize or control dust generating activities. If excessive dust levels are generated at transfer points, local exhaust ventilation may be needed.

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

<b>PHYSICAL STATE/APPEARANCE:</b>	Solid, grayish powder		
<b>BOILING POINT:</b>	None	<b>ODOR:</b>	None
<b>MELTING/FREEZING POINT:</b>	>2,000°F		
<b>SOLUBILITY IN WATER:</b>	Insoluble	<b>pH:</b>	6-8
<b>SPECIFIC GRAVITY:</b>	2.5 – 3.0		
<b>% VOLATILE BY WEIGHT:</b>	Not Applicable		
<b>VAPOR PRESSURE:</b>	Not Applicable		
<b>VAPOR DENSITY:</b>	Not Applicable		

**10. REACTIVITY/STABILITY:**

<b>STABILITY:</b>	Stable
<b>CONDITIONS OF REACTIVITY:</b>	Not Applicable
<b>HAZARDOUS POLYMERIZATION:</b>	Will not occur
<b>INCOMPATIBILITIES:</b>	Strong oxidizers
<b>DECOMPOSITION PRODUCTS:</b>	None, from heating

**11. TOXICOLOGICAL INFORMATION:**

<b>LD<sub>50</sub>:</b>	Not determined
<b>LC<sub>50</sub>:</b>	Not determined
<b>SENSITIZATION TO PRODUCT:</b>	None
<b>CARCINOGENICITY:</b>	Contains crystalline silica, a human carcinogen.
<b>IRRITANCY OF PRODUCT:</b>	Some irritation possible
<b>REPRODUCTIVE TOXICITY:</b>	No information available
<b>TERATOGENICITY:</b>	No information available
<b>MUTAGENICITY:</b>	No information available
<b>CHRONIC EXPOSURE:</b>	See Section 3
<b>NAME OF TOXICOLOGICALLY SYNERGISTIC PRODUCTS:</b>	Known lung carcinogens

**12. ECOLOGICAL INFORMATION:**

Do not flush to drain or storm sewer.

**13. DISPOSAL CONSIDERATIONS:****WASTE DISPOSAL METHOD:** Follow federal, state, and local regulations.**14. TRANSPORTATION INFORMATION:** Not regulated**15. REGULATORY INFORMATION:****OSHA:** Hazard Communication applies to this product for constituents listed in Section 2.**TSCA:** None**CERCLA REPORTABLE QUANTITY:** None**SARA TITLE III:****Section 302 Extremely Hazardous Substance:** None**Section 311/312 Hazard Categories:** None**Section 313 Toxic Chemicals:** None**RCRA:** None**STATE REGULATORY INFORMATION:** The following chemicals are specifically listed by individual states; other product specific health and safety data in other section of the MSDS may also be applicable for state requirements. For details on specific regulatory requirements, contact the appropriate state agency.

COMPONENT NAME	CAS #	CONC. %	STATE CODE
Crystalline Silica	14808-60-7	0-6.5	CA Proposition 65

**16. OTHER INFORMATION:****MSDS STATUS:** Replaces MSDS dated 9/18/92**REVISION NUMBER:** Version 2.0**PREPARED BY:** Paul Carlson Associates, Inc.  
Milwaukie, Oregon  
(503) 652-6040**DISCLAIMER:** The information contained in this form is based on data from sources considered reliable. However, Ross Island Sand & Gravel Co. does not guarantee the accuracy or completeness thereof. Ross Island Sand & Gravel Co. expressly disclaims all liability for loss or damage including consequential loss, or for injury to persons (including death) arising directly or indirectly for reliance upon the information or use of this material.